



5 monitoring the answered call for a tone  
6 indicative of a fax communication.

1 4. The method of claim 3, further comprising:  
2 retrieving from stored call forwarding service  
3 subscriber information at least one of a stored voice  
4 call forwarding telephone number and a stored fax  
5 forwarding telephone number, the stored voice call  
6 forwarding telephone number being used as said second  
7 telephone number, the stored fax forwarding telephone  
8 number being used as said third telephone number.

1 5. The method of claim 4, wherein said step of  
2 forwarding the first telephone call using a second  
3 telephone number includes:  
4 placing a telephone call to said second  
5 telephone number; and  
6 bridging the first telephone call and the  
7 telephone call to the second telephone number.

1 6. The method of claim 5,  
2 wherein detecting a first telephone call  
3 includes setting a terminating attempt trigger at a  
4 telephone switch on a telephone line corresponding to the  
5 first telephone number; and  
6 wherein placing a telephone call to said second  
7 telephone number and bridging the first telephone call  
8 and the telephone call to the second telephone number are

20250405 14:43:59



12 operating said service control point to  
13 instruct the telephone switch to connect the first  
14 telephone call to the telephone switch peripheral device;  
15 operating the telephone switch peripheral  
16 device to determine if the first telephone call is a fax  
17 or voice telephone call;

18 if the first telephone call is determined to be  
19 a voice telephone call,

20 i. operating the telephone switch  
21 peripheral device to retrieve a voice  
22 telephone call forwarding telephone number  
23 from a set of stored subscriber  
24 information including a voice telephone  
25 call forwarding telephone number and a fax  
26 telephone call forwarding telephone  
27 number; and

28 ii. forwarding the first telephone call  
29 using the retrieved voice telephone call  
30 forwarding telephone number; and

31 if the first telephone call is determined to be  
32 a fax telephone call,

33 i. operating the telephone switch  
34 peripheral device to retrieve the fax  
35 telephone call forwarding telephone number  
36 from the set of stored subscriber  
37 information; and

38 ii. forwarding the first telephone call  
39 using the retrieved fax telephone call  
40 forwarding telephone number.

FOIA b 7 - EXEMPT

1 9. The method of claim 8, wherein forwarding the first  
2 telephone call using the retrieved voice telephone call  
3 forwarding telephone number includes operating the  
4 telephone switch peripheral device to:

5 place a call to said call forwarding telephone  
6 number; and

7 bridge the first telephone call and the cal to  
8 said call forwarding telephone number.

1 10. The method of claim 9, wherein forwarding the first  
2 telephone call using the retrieved fax telephone call  
3 forwarding telephone number includes operating the  
4 telephone switch peripheral device to:

5 place a call to said fax telephone call  
6 forwarding telephone number; and

7 bridge the first telephone call and the call to  
8 said fax telephone call forwarding telephone number.

1 11. The method of claim 8, further comprising, prior to  
2 operating the telephone switch peripheral device to  
3 determine if the first telephone call is a fax or voice  
4 telephone call:

5 storing said set of subscriber information  
6 including a voice telephone call forwarding telephone  
7 number and a fax telephone call forwarding telephone  
8 number in said telephone switch peripheral device.

1 12. The method of claim 11, further comprising, storing  
2 in said set of subscriber information an E-mail address

FOI b7c b7d b7e b7f b7g b7h b7i b7j b7k b7l b7m b7n b7o b7p b7q b7r b7s b7t b7u b7v b7w b7x b7y b7z

3 to be used for forwarding a fax by E-mail, the method  
4 further comprising:

5 operating the telephone switch peripheral  
6 device to receive a fax message transmitted by said first  
7 telephone call; and

8 forwarding the fax message in an E-mail  
9 addressed using the E-mail address stored in said set of  
10 subscriber information.

1 13. The method of claim 12, wherein the step of  
2 operating the telephone switch peripheral device to  
3 receive the fax message includes the step of:

4 monitoring the bridged call, between the first  
5 telephone call and the call to said fax telephone call  
6 forwarding telephone number, for fax data corresponding  
7 to the fax message.

1 14. A machine-readable medium, comprising:

2 a call forwarding service subscriber record,  
3 the record including:

4 a fax forwarding telephone number; and  
5 a voice telephone call forwarding  
6 telephone number.

1 15. The machine-readable medium of claim 14, wherein  
2 said call forwarding service subscriber record further  
3 includes:

4 an E-mail address for use when forwarding faxes  
5 by E-mail.

FOIb70-5474860

1 16. The machine-readable medium of claim 15, further  
2 comprising a subscriber identifier, a call forwarding  
3 status indicator and a fax forwarding status indicator.

1 17. The machine-readable medium of claim 16, further  
2 comprising:

3 a plurality of said call forwarding service  
4 subscriber records, each of said plurality of call  
5 forwarding service subscriber records corresponding to a  
6 different service subscriber.

1 18. The machine-readable medium of claim 17, wherein  
2 said machine-readable medium is part of a data storage  
3 device in a service control point, the machine-readable  
4 media further including, a set of call processing  
5 instructions for each set of subscriber information.

1 19. A communications method, the method comprising the  
2 steps of:

3 operating a telephone switch to detect a call  
4 to a telephone number;

5 connecting the telephone call to a peripheral  
6 device coupled to the telephone switch;

7 operating said peripheral device to:

8 i. answer said call;

9 ii. receive a facsimile message via the  
10 answered call; and

2025 RELEASE UNDER E.O. 14176

11 ii. send an E-mail message including said  
12 received facsimile message to a call  
13 forwarding service subscriber.

1 20. The communications method of claim 19, further  
2 comprising the step of:  
3 using the called telephone number to access a  
4 call forwarding service subscriber record; and  
5 retrieving from the call forwarding service  
6 subscriber record an E-mail address to be used for  
7 forwarding a fax message.

1 21. The communications method of claim 20, wherein the  
2 step of operating a telephone switch to detect a call to  
3 a telephone number includes:  
4 setting a terminating attempt trigger on a  
5 telephone line corresponding to said telephone number.

1 22. The communications method of claim 21, further  
2 comprising the step of:  
3 contacting a service control point for call  
4 processing instructions in response to activation of said  
5 terminating attempt trigger; and  
6 wherein connecting the telephone call to a  
7 peripheral device includes:  
8 operating the telephone switch to couple  
9 the detected call to the peripheral device in  
10 response to an instruction received from the  
11 service control point.

2025-04-20 10:44:50



1 23. The communications method of claim 22,  
2 wherein the instruction received from the  
3 service control point is a STOR message; and  
4 wherein the peripheral device is coupled to  
5 said telephone switch by an additional telephone switch.

1 24. A fax forwarding method, the method comprising:  
2 for each of a plurality of fax forwarding  
3 service subscribers, creating a subscriber record  
4 including:  
5 at least one telephone number  
6 corresponding to a telephone line on which the  
7 forwarding service subscriber may receive a fax  
8 call; and  
9 an E-mail address to be used to forward a  
10 fax received by answering a call directed to  
11 said at least one telephone number;  
12 monitoring a plurality of said telephone lines  
13 on which fax forwarding service subscribers may receive  
14 fax calls; and  
15 in response to receiving a fax call on one of  
16 said monitored lines:  
17 determining, by accessing the subscriber  
18 record corresponding to the telephone line on  
19 which the fax call is received, an E-mail  
20 address to be used for forwarding a fax  
21 received on said telephone line; and

22 forwarding by E-mail, using the determined  
23 E-mail address, a fax received on said  
24 telephone line.

1 25. The method of claim 24, wherein monitoring a  
2 plurality of said telephone lines on which fax forwarding  
3 service subscribers may receive fax calls includes:  
4 setting an AIN terminating attempt trigger on  
5 each of said plurality of telephone lines.

1 26. The method of claim 24, further comprising, in  
2 response to receiving a fax call on one of said monitored  
3 lines, performing the additional steps of:  
4 determining, by accessing the subscriber record  
5 corresponding to the telephone line on which the fax call  
6 is received, a fax forwarding telephone number to be used  
7 for forwarding a fax received on said telephone line; and  
8 placing a call using the determined fax  
9 forwarding telephone number; and  
10 bridging the placed call and the received fax  
11 call thereby forwarding the fax call by telephone.

RECEIVED - SEP 10 1990